

building and equipment of an institute, provided the Government of India undertook its maintenance. A site was acquired in 1930, and the building erected adjacent to the Tropical School, which was opened in 1932. The work of the Institute is carried on in six sections, and a representative staff has been appointed under the directorship of Lieut. Col. A. D. Stewart, who is also the professor of hygiene. A description of the building is given, together with an account of the work of the sections, and of the research work that is in progress.

Food Poisoning

THE Ministry of Health has issued a memorandum on the steps to be taken by medical officers of health (outside London) in suspected cases of food poisoning (Memo. 188/Med.). The two classes of food poisoning are dealt with—contamination of food by poisonous chemicals and bacterial infections of food, which are far more frequent. Directions are given outlining the methods of investigating outbreaks, the collection of material for chemical or bacteriological examination, and method of packing and transmission to the Ministry, with hints on the chemical or bacteriological examination. In an appendix, a scheme is outlined for the routine inquiry into outbreaks of poisoning by meat foods, and in a second appendix valuable details are given for the isolation and identification of the bacteria (*Salmonella*) concerned in bacterial food poisoning.

International Congress on Soil Science

THE papers presented to the third International Congress on Soil Science, held recently at Oxford, embody work that is representative of most aspects of soil science; these are issued in two volumes (London: Thomas Murby and Co., 1935). The first volume contains those presented to the several commissions, and the second includes papers read at the plenary sessions, together with the address of the president, Sir John Russell. The papers are in English, French or German. The president, in his address, dealt with the contribution of soil science towards improving economic conditions, mentioning in particular the value of the surveying and mapping of soils as a preliminary to all schemes of agricultural development. As interesting examples of such contribution, those mentioned by Hardy, in his paper on "Some Aspects of Tropical Soils", may be quoted; these dealt more particularly with quantitative soil profile investigations. In the Caribbean region, for example, studies of this nature have rendered possible the exact definition of soil best adapted to the growth of several important orchard and field crops, and have made manifest certain soil factors that are definitely harmful to those crops. This aspect of soil work was dealt with by the commission on soil genesis, morphology and cartography and by that on the application of soil science to land amelioration.

No part of soil science stands to gain more from a Congress of this nature than that represented by those two commissions, since work in this field

would lose much of its value without uniformity in methods of approach and expression of results. Studies on the composition and structure of the soil, divided for the purpose of the Congress into four commissions, namely, soil physics, soil chemistry, soil microbiology and soil fertility, reflect the progress that has been made in recent years in this aspect of soil work. Schofield made a contribution in which soil moisture relationships are regarded from a new point of view based on energy considerations, and introduced a scale to specify the degree of wetness or dryness of a soil; it was shown that by carefully distinguishing wetting from drying conditions, a more rational interpretation could be applied to data on plant wilting and field moisture capacity.

Cooke's Illustrations of British Fungi

A MAGNIFICENT series of eight volumes of "Illustrations of British Fungi" appeared towards the close of the last century. They were the work of Dr. M. C. Cooke, and served as a very pleasing and facile reference for naming the larger fungi. More recent advances in the scientific nomenclature of the Basidiomycetes, however, have shown that the names attached to the plates were not always correct. A great deal of confusion has resulted, and has somewhat diminished the usefulness of the work. Mr. A. A. Pearson has largely remedied this state of affairs, by publishing a modernised index to the "Illustrations" (*Trans. Brit. Mycol. Soc.*, 20, Pt. 1, 33-95, Aug. 1935). This was originally based on notes prepared by Dr. Quellet, but Mr. Pearson also obtained the opinions of Prof. René Maire and Mr. Carleton Rea. These authorities concur upon a large number of species, but are by no means agreed upon others. The student of mycology will, however, be able to find the highest common factor between them where necessary, and will be able to use his Cooke's "Illustrations" again, with reasonable accuracy.

Fossil Elephants in Eldorado

A NOTABLE discovery of the remains of the extinct Columbian elephant, one of the largest of elephants, is recorded from Eldorado, Oklahoma, by Science Service, Washington, D.C. The University of Oklahoma and Kansas State College have united in excavating certain mounds in which casual digging had revealed fossil bones, and the first results include seven skulls and many bones, tusks and teeth of the species referred to. The elephant remains range from those of mature individuals to young ones, five to seven years old. In addition to these remains, bones of extinct species of camel, horse and bison have been excavated. It appears that the area of the discoveries was an ancient water-hole which had a bottom of very soft mud in which the animals had become bogged.

Guide to Statistics

THE "Guide to Current Official Statistics of the United Kingdom", for 1934 (H.M. Stationery Office, 1s.), has recently been published. This guide, now in its thirteenth year, has become almost indispensable

to all workers who have to deal with blue books and other official papers. It is so arranged that with a minimum of delay it is possible to find what statistics are available on any given subject. The degree of analysis of the figures, the dates and places to which they apply, and the price of the volumes containing them can be readily found. There is also given a list of the publications of various Government departments arranged under the departments.

National Radium Commission

THE new National Radium Commission has been elected and consists of the following members: the Earl of Donoughmore (Chairman), Sir Cuthbert Wallace (Vice-Chairman), Dr. T. Carnwath, Dr. T. Ferguson, Dr. Rupert Hallam, Dr. G. W. C. Kaye (appointed by the Department of Scientific and Industrial Research), Prof. J. C. G. Ledingham (appointed by the Medical Research Council), Mr. J. J. M. Shaw, Mr. G. F. Stebbing, Prof. Beckwith Whitehouse, Prof. James Young; *Joint Secretaries*, Dr. G. W. C. Kaye and Mr. G. F. Stebbing; *Office Secretary*, Miss K. Griffiths. The Commission will meet as heretofore at 5 Adelphi Terrace, Strand, W.C.2.

The Sky in October

ALL the naked-eye planets are now absent from the evening sky except Saturn, which is conspicuous and fairly well placed for evening observation: the stellar magnitude will decline from $+0.8^m$ to $+1.0^m$ during the month, but the planet is rather far south, as also was Jupiter this summer, Saturn's declination being $-11^\circ 50'$ on October 15. Venus is now an early morning object, and will attain its greatest brilliance on October 15. Mars and Jupiter are both near the sun. Uranus will be in opposition on October 27, and there will be a conjunction of Neptune with Venus on October 25, Venus being $2^\circ 6' S$. The minor planet Vesta is now in the evening sky, not far from Saturn. Intensive observations on the minor planets have been started at Greenwich, in pursuit of a plan for making greater use of these small objects for determining the position of the equinox. They just show a disc in the 8-in. transit telescope, but resemble a star far more closely than does Venus (and *a fortiori* the sun), so that the minor planets are very suitable objects to observe in order to tie up the right ascensions and declinations of the solar system with the fundamental right ascensions and declinations of the stars. The principle involved is that the observation of a planet from the earth is equal and opposite to an observation of the earth from the planet, so that besides observing the planet's orbit we observe our own, and find the point where our orbit cuts the equator, that is, the equinox.

Announcements

THE opening lecture of a series on "Scientific Progress" organised by the Sir Halley Stewart Trust will be given by Sir James Jeans in the Memorial Hall, Farringdon Street, London, on Tuesday, October 22. The subject will be the new world

picture as seen by the modern physicist. Other contributors to the series are Sir William Bragg, Prof. E. V. Appleton, Prof. E. Mellanby, Prof. J. B. S. Haldane, and Prof. Julian Huxley. Free reserved tickets are obtainable from the Trust, 32 Gordon Square, W.C.1.

THE Robert Koch medal has recently been awarded by the City of Berlin to Dr. Ferdinand Sauerbruch, professor of surgery in Berlin, the Emil Fischer medal to Dr. Adolf Butenandt, professor of organic chemistry and technology in Danzig, and the Liebig medal to Dr. Walther Roth, professor of physical chemistry at Brunswick.

A LECTURE on the work of the expedition of the Egypt Exploration Society (2 Hinde Street, W.1) to Tell el-Amarna 1934-5 will be given by the field director, Mr. J. D. S. Pendlebury, on Monday, October 7, at 8.30 p.m. in the rooms of the Royal Society, Burlington House, Piccadilly, London, W.1.

THE sixtieth series of free lectures at the Horniman Museum, Forest Hill, S.E.3, will begin on October 12 at 3.30, when Mr. E. C. Stuart Baker will lecture on "Wild Men and Wild Beasts in India". Further information can be obtained from the Curator of the Museum.

IT has come to the notice of the National Institute of Agricultural Botany that a Danish 're-selected' stock of Resistance Oats is being offered on the English market. The Institute desires to state that no seed of this variety was distributed prior to the autumn of 1934.

THE Electrodepositors' Technical Society, which has been responsible for the organisation of the Electrodeposition Exhibition in the Science Museum at South Kensington, will hold a Soirée in the Museum on October 18. The Exhibition will be open from 6.15 until 10.30 p.m., during which time a lecture will be given by Mr. S. Field on progress in electrodeposition and a film will be shown dealing with commercial applications of electro-deposits. Admission to the Museum will be by ticket. The Society welcomes applications from members of kindred societies and institutions and from others interested in the theory or practice or applications of electro-deposition. Applications should be made immediately to the assistant hon. secretary, Capt. A. I. Wynne-Williams, 12A, Raleigh House, Larkhall Estate, London, S.W.8.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:

An assistant in the London Museum, St. James's, S.W.1—The Keeper (Oct. 28).

A secretary for the Society for Cultural Relations with the U.S.S.R., 21 Bloomsbury Square, London, W.C.1—The Chairman.

A woman lecturer in geography and mathematics in St. Hild's College, Durham—The Principal.